

The Inconsolata Package

Michael Sharpe

July 13, 2013

The package provides support files for the typewriter font Inconsolata. To use it add `\usepackage{zi4}` to your document. This will change the typewriter font family to `zi4`, the family name used by this package, which replaces the old `inconsolata`, where the family name was `fi4`. The package also provides extensions of the Inconsolata fonts in regular and bold weights, adding some glyphs which may optionally replace existing `quotedbl` and `quotesingle` and lower-case L, along with new `arrowright` and `arrowleft` glyphs. As with Karl Berry's original `inconsolata` package, the \LaTeX package `zi4` offers four encodings—`T1`, `LY1`, `OT1` and `QX`—and provides the following options which some may find improve its utility for displaying verbatim text such as code fragments.

- The option `scaled=x` allows you to scale all typewriter text and verbatim text by the factor `x`.
- The default zero in `zi4` is now slashed. The unslashed zero may be specified with the option `var0`.
- For those who find the default lower-case L(1) a bit too close to the numeral 1, there is an option `var1` which substitutes a more distinctive shape for all glyphs related to lower-case L.
- The `zi4` package loads the `textcomp` package, which points to a `TS1`-encoded font that has been modified to have uncurved left and right quotes, especially important in code fragments, by use of `textcomp` glyphs `\textasciigrave` and `\textquotesingle`. The `varqu` option provides further upright quote forms for glyphs that are not part of the `textcomp` package, such as the default double quote glyph `quotedbl` and `quotesingle`, which by default have a small slant. (Note that the latter is not part of all encodings—it is present in `OT1`, `LY1` and `QX`, but not in `T1`.)
- The package loads `upquote` by default, but provides an option `noupquote` to override it.

When used in ordinary typewriter mode (ie, with `\texttt{}` or the deprecated form `{\tt }`), left and right quotes are rendered as in ordinary text. For example,

```
\texttt{'xy' " \textasciigrave \textquotesingle}
```

renders (with option `varqu`) as `'xy' " ``. With the `upquote` package, verbatim text, eg:

```
\verb|'xy' "|
```

renders as you would expect it in code samples: `'xy' "`

Note on the QX encoding: The encoding files used as part of this package, derived from the `inconsolata` package, seem to have some inconsistencies with `qxenc.def` made necessary as a compromise to get text and verbatim modes functioning for a wide class of common characters.

In the following examples, the claim that all encodings render the same applies only to the very limited selection of quote glyphs tested. In practice, `QX` encoding behaves worse than the other encodings for `zi4`.

Effects of the options `varqu`, `noupquote`

With `varqu`: `upquote` loaded by default—all encodings render the same.

Input	Text mode	Verbatim mode
<code>\textasciigrave</code>	`	
<code>\textquotesingle</code>	'	
"	"	"
,	,	,
`	‘	‘

Without `varqu`: `upquote` loaded by default—all encodings render the same.

Input	Text mode	Verbatim mode
<code>\textasciigrave</code>	`	
<code>\textquotesingle</code>	'	
"	"	"
,	,	,
`	‘	‘

Without `varqu`, `noupquote`: `upquote` NOT loaded—all encodings render the same.

Input	Text mode	Verbatim mode
<code>\textasciigrave</code>	`	
<code>\textquotesingle</code>	'	
"	"	"
,	,	,
`	‘	‘

With `varqu`, `noupquote`: `upquote` NOT loaded—all encodings render the same.

Input	Text mode	Verbatim mode
<code>\textasciigrave</code>	`	
<code>\textquotesingle</code>	'	
"	"	"
,	,	,
`	‘	‘

Conclusion: To me, it is overwhelmingly clear that the best results come from specifying the option `varqu`, not specifying `noupquote`, and avoiding the `QX` encoding wherever possible.

A technical note concerning `LY1` or `QX` encodings: These encodings make their own definitions of `\textquotesingle` as glyphs in the main text font. Using the `TS1` glyph with upright shape so that `upquote` works correctly with these encodings requires the incantation:

```
\UndeclareTextCommand{\textquotesingle}{LY1} % or QX
\DeclareTextSymbol{\textquotesingle}{TS1}{39}
\usepackage{upquote}
```

which is built-in to the `zi4.sty` code and need not be repeated.

1 Opentype issues

The package includes two Opentype fonts named `Inconsolatazi4-Regular` and `Inconsolatazi4-Bold`, which may be loaded with `fontspec`:

```
\fontspec{Inconsolatazi4} %slashed zero, curly quotes, default l
```

The fonts contain three Stylistic Set variants that may be used to control the shape of lower case `l` (`ss01`), the form of zero (`ss02`) and the shape of quotes (`ss03`). One or more of these may be specified as follows:

```
\textsf[StylisticSet=1]{Inconsolatazi4-Regular} % shapely l
```

```
\textsf[StylisticSet=2]{Inconsolatazi4-Regular} % unslashed zero
```

```
\textsf[StylisticSet=3]{Inconsolatazi4-Regular} % straight quotes
```

```
\textsf[StylisticSet={1,3}]{Inconsolatazi4-Regular} % shapely l, upright quotes
```

Note that one cannot expect exactly the same rendition from \LaTeX typewriter modes and the `fontspec` typewriter modes. For one thing, in \LaTeX , the typewriter left quote symbol is `quoteleft`, while under `fontspec`, it is the grave symbol.